

CLAIMS

What is claimed is:

1. A self service data interface, comprising:

5 first communications logic operative to provide communications with a personal data device;

second communications logic operative to provide communications with a data infrastructure in a neighborhood of the self service data interface, the second communications logic being coupled to the first communications logic to enable communications between the personal data device and the data infrastructure; and

20 a processor coupled to the first and second communications logic, the processor being operative to execute a data interface management process including (i) interacting with the data infrastructure via the second communications logic to obtain information about available data services, the information including information describing the manner in which the available data services are accessed, and (ii) interacting with the personal data device via the first communications logic to provide the information about the available data services to a user of the personal data device.

25 2. A self service data interface according to claim 1, wherein the first communications logic includes at least first and second communications interfaces, the first communications interface interfacing to a wire link, and the second communications interface interfacing to a wireless link.

3. A self service data interface according to claim 2, wherein the wire link employs a carrier-sense multiple-access communications protocol.

5 4. A self service data interface according to claim 2, wherein the wireless link employs a master-slave communications protocol.

10 5. A self service data interface according to claim 1, wherein the information about the available data services provided to the personal data device is formatted as a hypertext page.

15 6. A self service data interface according to claim 5, wherein the hypertext page is a hypertext markup language (HTML) page.

20 7. A self service data interface according to claim 5, wherein the hypertext page is an extensible markup language (XML) page.

25 8. A self service data interface according to claim 1, wherein the information about the available data services provided to the personal data device includes hot links to locations within the data infrastructure at which the services can be accessed.

30 9. A self service data interface according to claim 8, wherein the hot links include text formatted according to a structured naming scheme.

35 10. A self service data interface according to claim 1, wherein the data interface management process further includes monitoring the status of the communications with the personal data device.

11. A self service data interface according to claim 1, wherein the data interface management process further includes monitoring the status of identified problems in the data infrastructure, and providing information reflecting the monitored status to the personal data device for use by the user.

12. A method by which a user of a personal data device obtains information about and access to data services available in a data infrastructure to which the personal data device is coupled, comprising:

storing information about the available data services in a data infrastructure, the information including information describing the manner in which the available data services are accessed;

providing the information stored in the data infrastructure to a user presentation entity responsible for informing the user about the available data services including the manner in which they are accessed, the user presentation entity storing the information in a format enabling ready retrieval and perusal by the user;

providing the information stored in the user presentation entity to a cooperating entity in the personal data device for presentation to the user;

generating, at the personal data device, a message containing information provided from the user presentation entity identifying a service to be accessed in the data infrastructure, and sending the message to the data infrastructure; and

upon receipt of the message from the personal data device at the data infrastructure, invoking the identified service and enabling the identified service to communicate with a

cooperating entity in the personal data device for user interaction with the identified service.

13. A method according to claim 12, wherein the entity cooperating with the user presentation entity is a browser.

14. A method according to claim 12, wherein the information about available data services provided to the personal data device is formatted as a hypertext page.

15. A method according to claim 14, wherein the hypertext page is a hypertext markup language (HTML) page.

16. A method according to claim 14, wherein the hypertext page is an extensible markup language (XML) page.

17. A method according to claim 12, wherein the information about available data services provided to the personal data device includes hot links to locations within the data infrastructure at which the services can be accessed.

18. A method according to claim 17, wherein the hot links include text formatted according to a structured naming scheme.

19. A method according to claim 12, further comprising monitoring, by the user presentation entity, of status of the communications with the personal data device.

20. A method according to claim 12, further includes monitoring, by the user presentation entity, of status of identified problems in the data infrastructure, and providing information reflecting the monitored status to the personal data device for use by the user.